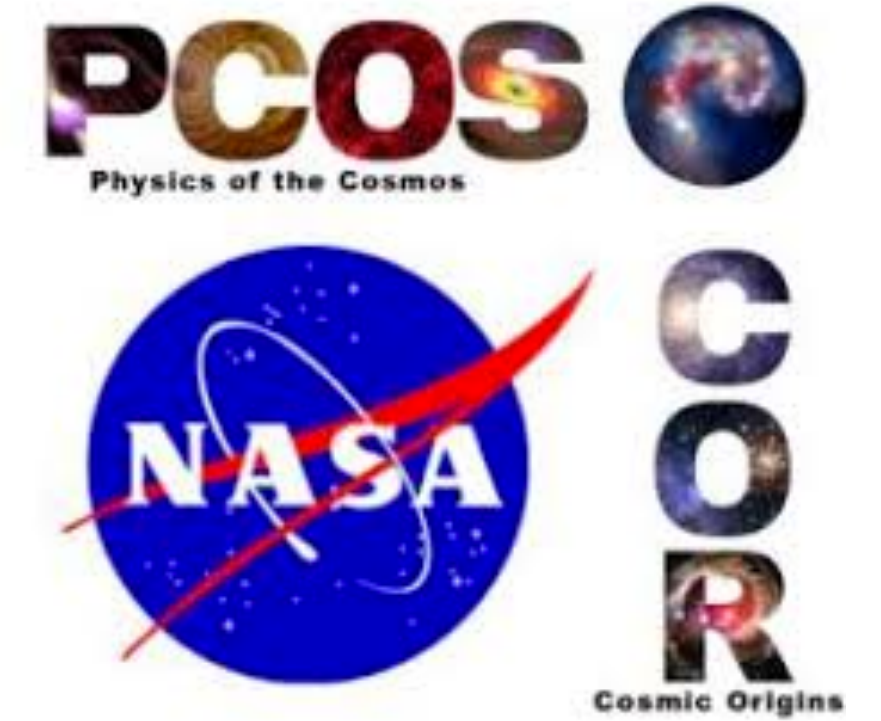


Physics of the Cosmos



X-ray Science Interest Group

Co-Chairs:

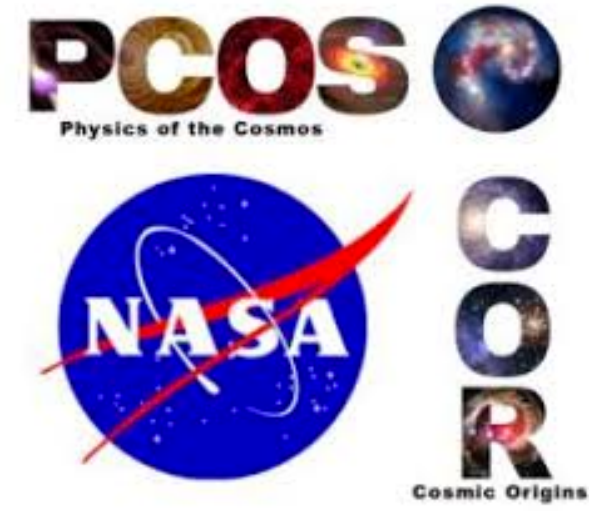
Ryan Hickox
Dartmouth College

Jillian Bellovary
CUNY - Queensborough
Community College

Grant Tremblay
CfA | Harvard & Smithsonian

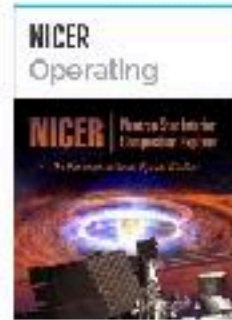
AAS Annual Meeting
13 January 2020

Schedule for this session



Science with Ongoing Explorer Missions

- **Gehrels/Swift** – Jamie Kennea, Penn State (20 mins)
- **NuSTAR** – Kristin Madsen, CRESST and X-ray Astrophysics Laboratory, GSFC (20 mins)
- **NICER** – Erin Kara, MIT (20 mins)

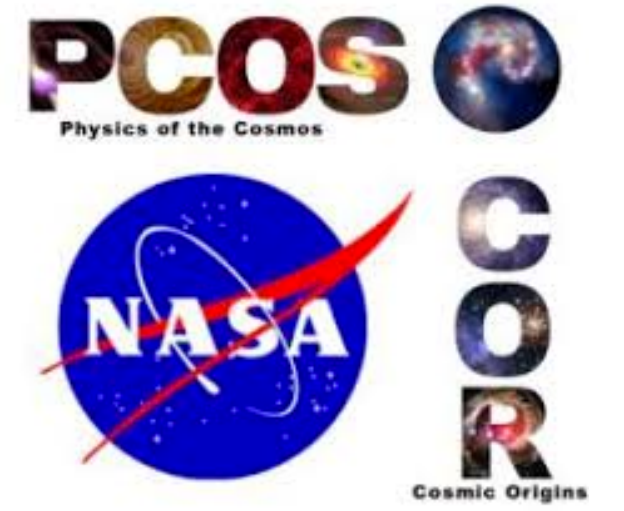


Status of Upcoming Explorer Missions

- **Imaging X-ray Polarimetry Explorer (IXPE)** – Martin Weisskopf, MSFC (10 mins)
- **X-ray Imaging and Spectroscopy Mission (XRISM)** – Brian Williams, GSFC (10 mins)



Intro to XRSIG



X-ray Science Interest Group

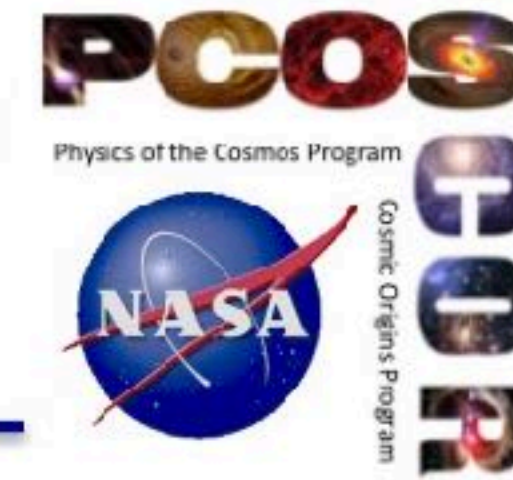
The goal of the X-ray Science Analysis Group (XRSIG) is to provide quantitative metrics and assessments to NASA in regard to future X-ray observatories. Specifically, the XRSIG will

- Track and analyze evolving science goals and requirements in X-ray astronomy, especially as current "hot" topics evolve.
- Provide an active communication forum for X-ray astrophysics (e.g., via town hall meetings at venues such as AAS and APS meetings).
- Support mission studies and concept development for future X-ray observatories.
- Analyze technology development and prioritization plans with respect to redefined science goals and the evolution of mission concepts (i.e., the XRSIG will aid the PhysPAG in analyzing technology needs).

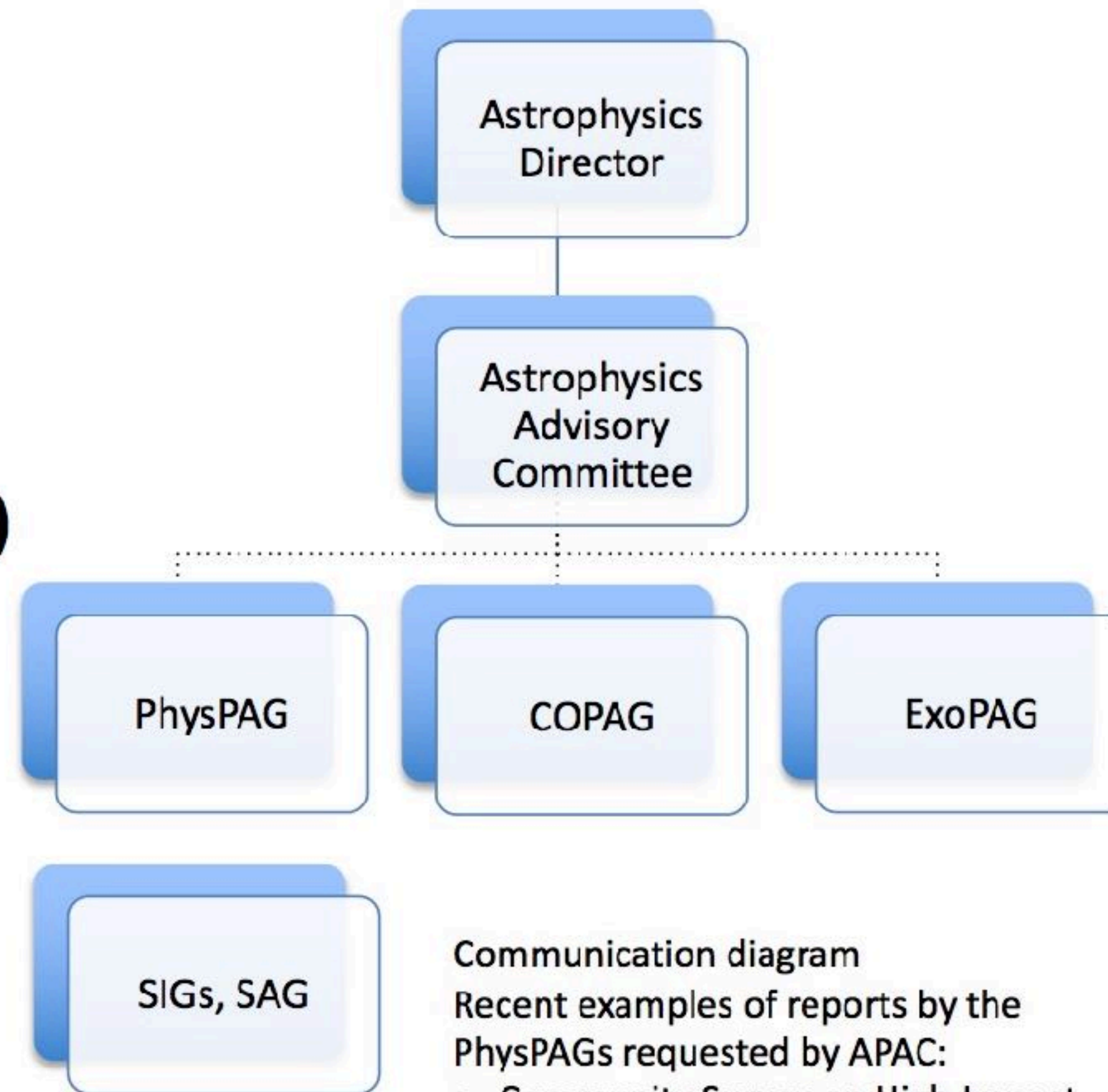
The XRSIG is open to all members of the community.

If you are interested in contributing to the work of the XRSIG, please subscribe using the link below. For other inquiries, e-mail co-chairs Ryan Hickox at ryan.c.hickox@dartmouth.edu, Jillian Bellovary at jbellovary@amnh.org, and Grant Tremblay at grant.tremblay@cfa.harvard.edu

Communicating with NASA Astrophysics via the Program Analysis Groups (PAGs)



- The Physics of the Cosmos Program Analysis Group (**PhysPAG**) coordinates input and analysis from the scientific community in support of the PCOS program objectives.
- Study Analysis Groups (**SAGs**) conduct specific analyses. PCOS started a SAG on Multi Messenger Astrophysics (**MMASAG**)
- Science Interest Groups (SIGs) are longer-standing discipline fora.
 - IPSIG
 - GWSIG
 - **XRSIG**
 - GammaSIG
 - CRSIG
 - CoSSIG

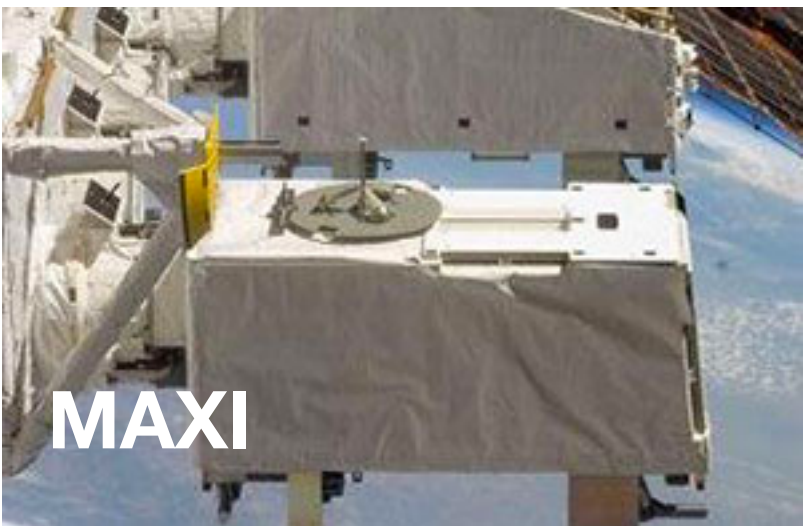
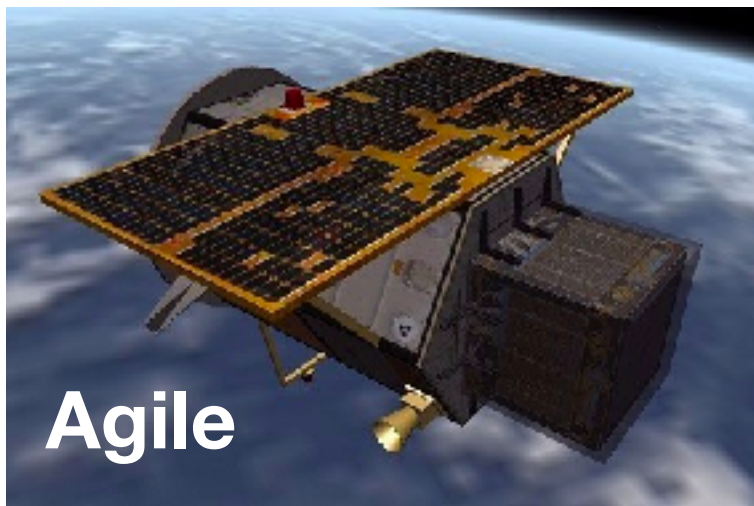
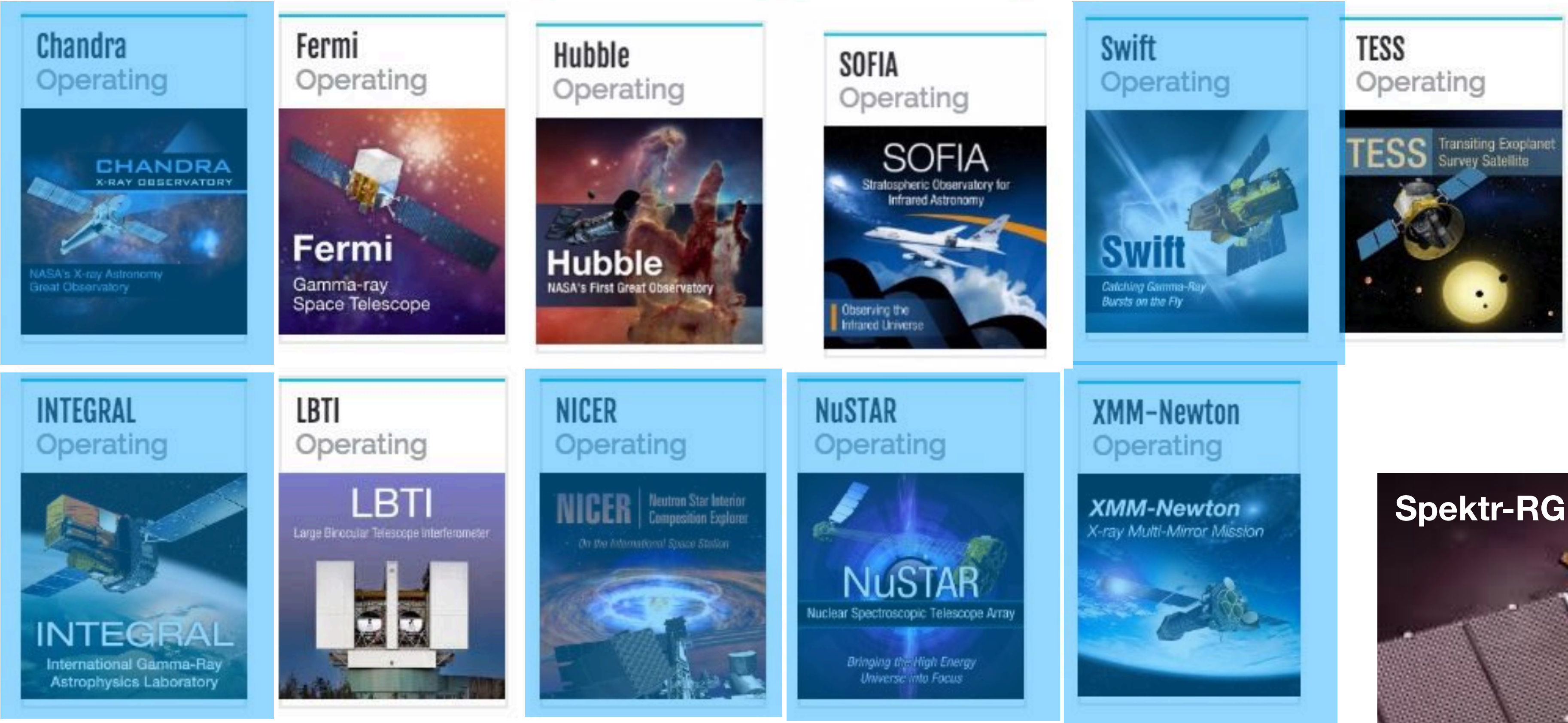
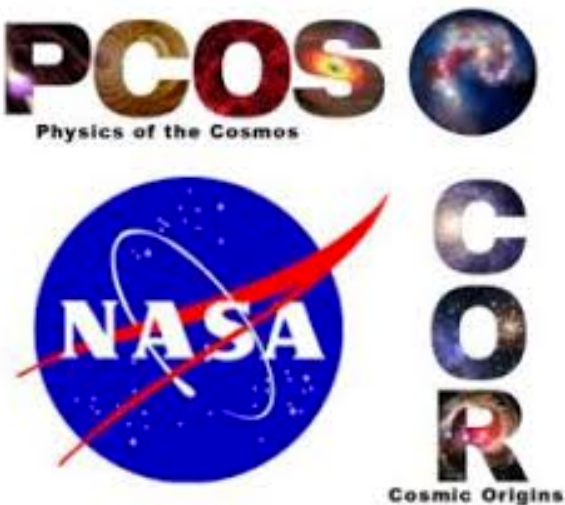


Communication diagram

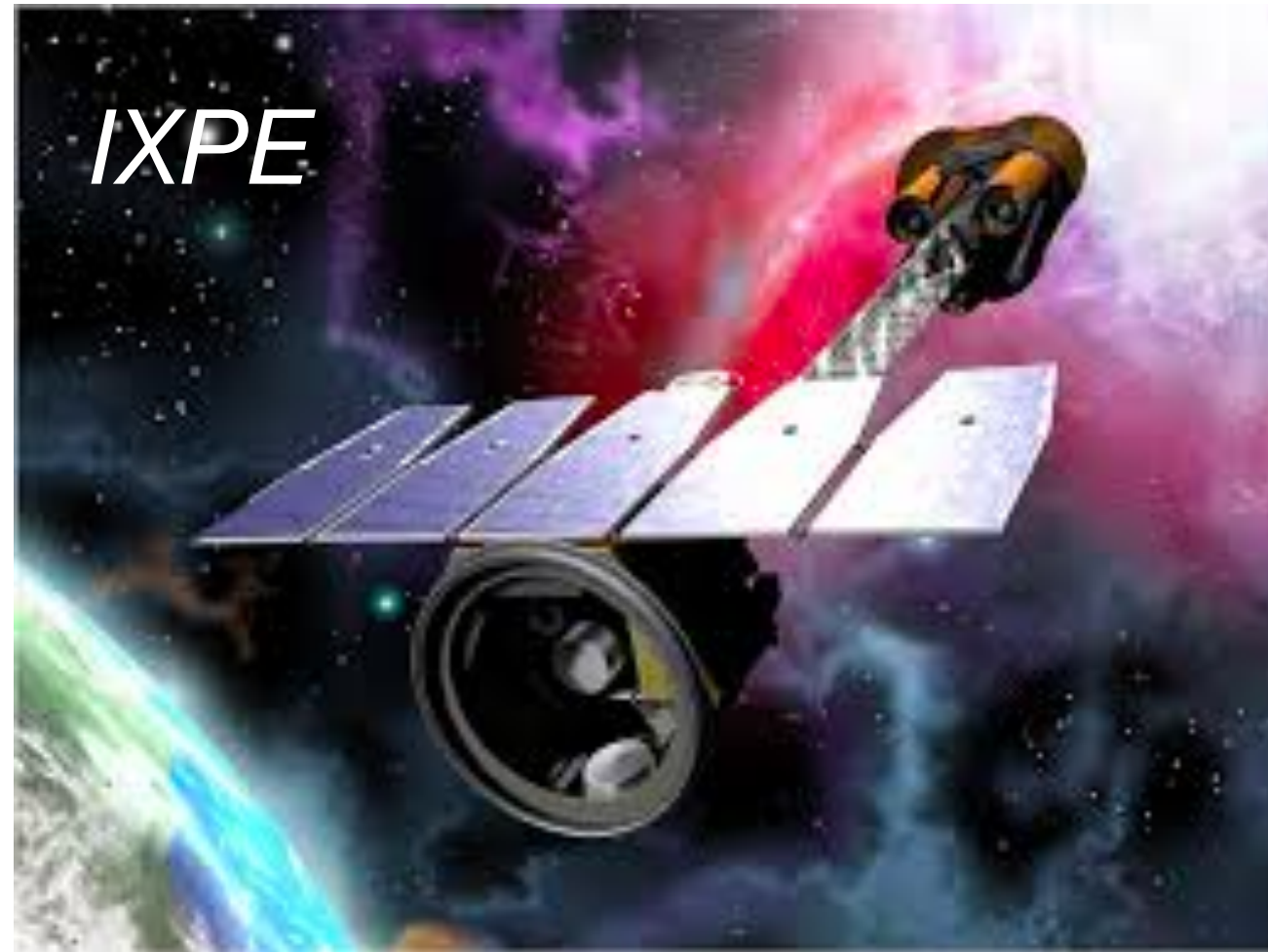
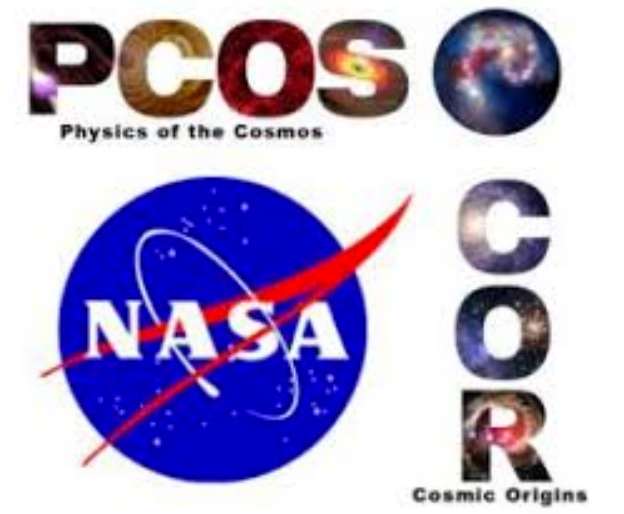
Recent examples of reports by the PhysPAGs requested by APAC:

- Community Survey on High-Impact Research Science
- Community Survey on Possible Delay in 2020 Decadal Survey

Current X-ray space missions



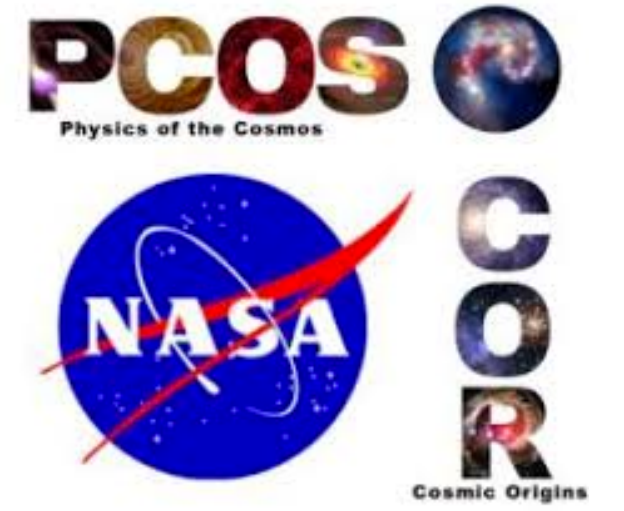
Upcoming X-ray space missions



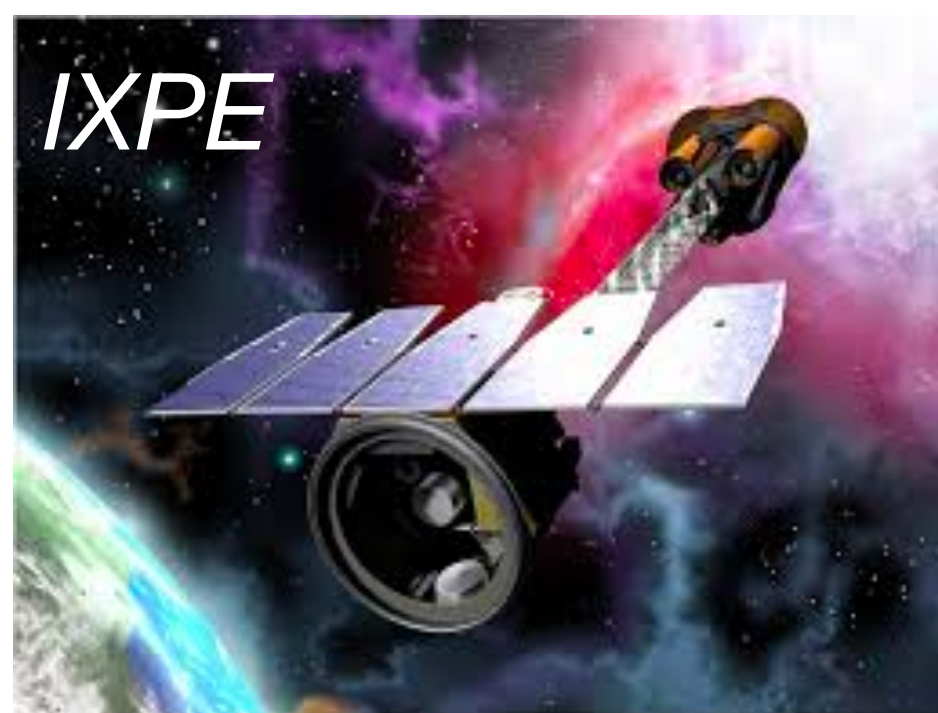
ATHENA:



X-ray Explorer missions



Launch 2021



Launch 2022



Draft solicitations

(Announced Jan 6 2021, comments due Feb 25 2021)



<https://explorers.larc.nasa.gov/2021APMIDEX/MIDEX/index.html>



<https://explorers.larc.nasa.gov/2021APMIDEX/MO/index.html>

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